Dr. Parag Prakash Sutar Assistant Professor Department of Food Process Engineering, National Institute of Technology Rourkela 769 008 (Odisha) INDIA Telephone (O) +916612462903 Mo: 09662080068 <u>Email:sutarp@nitrkl.ac.in</u> Homepage: <u>https://sites.google.com/site/drparagsutar/</u>



EDUCATION	
Indian Institute of Technology Kharagpur, India	
PhD (Agricultural and Food Engineering)	2008
G.B.Pant University of Agriculture and Technology, Pantnagar, India	
MTech (Process and Food Engineering)	2003
Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, India	
BTech (Agricultural Engineering)	2001
AWARDS	
McGill University, Training sponsorship by Canadian International Development Agency	2007
National Doctoral Fellowship by All India Council of Technical Education (AICTE), New Delhi for PhD program at Indian Institute of Technology Kharagpur	2004
Junior Research Fellowship (JRF) by Indian Council of Agricultural Research during MTech Program	2001
TEACHING EXPERIENCE	
Anand Agricultural University, Anand, Gujarat, India	
Assistant Professor- Food Engineering	2009-2014
RELATED EXPERIENCE	
Institute of Chemical Technology, Matunga (E), Mumbai	
Post-Doctoral Fellow– Chemical Engineering	2008-2009
INTERNATIONAL TRAINING	
McGill University, Canada Department of Bio resource Engineering - Postharvest and Food Engineering Practices	Jun-Aug 2007
PUBLICATIONS AND PAPERS	

## Journal Issue Edited

### **Guest Editor**

1. B.N. Thorat and **Sutar P.P.** (2010) Special Issue: Selected Papers Presented at the 16th International Drying Symposium (IDS2008), Drying Technology: An International Journal, Volume 28(5)

Editor

1. P.P. Sutar (2013) Journal of Food Research and Technology, Vol 1 (1), 1-44

2. P.P. Sutar (2013) Journal of Food Research and Technology, Vol 2 (1), 1-45

#### **Book Chapter**

 Sutar P.P. and B.N.Thorat (2010) Drying of Roots. In "Drying of Foods, Vegetables and Fruits", Vol 2, Ed. Jangam SV, C. Law and A.S.Mujumdar, Published at http://serve.me.nus.edu.sg, Singapore

#### **Articles in Journals**

#### Article

# Impact

- Factor 1 Sutar P.P. and D.K. Gupta (2007) Mathematical Modeling of Mass Transfer in Osmotic Dehydration of Onion 2.276 Slices. Journal of Food Engineering, 78(1), 90-97 2 Patel D. N., P. P. Sutar and N. Sutar (2013) Development of Instant Fermented Cereal-Legume Mix Using 1.814 Pulsed Microwave Vacuum Drying, Drying Technology: An International Journal, 31(3), 314-328 3 Sutar P.P., G.V.S. Raghavan, Y. Gariepy, S. Prasad and A. Trivedi (2012) Optimization of Osmotic Dehydration 1.814 of Potato Cubes under Pulsed Microwave Vacuum Environment in Ternary Solution. Drying Technology, 30(13), 1449-1456 4 Thorat B.N. and P.P.Sutar, (2010) Guest Editorial, Special Issue: Selected Papers Presented at the 16th 1.814 International Drying Symposium (IDS2008), Drying Technology: An International Journal, 28(5), pp 565 5 Sutar P.P. and S. Prasad (2011) Optimization of Osmotic Dehydration of Carrots under Atmospheric and Pulsed 1.814 Microwave Vacuum Conditions. Drying Technology: An International Journal, 29(3), 371-380 6 Sutar P. P. and S Prasad (2007). Modeling Microwave Vacuum Drying Kinetics and Moisture Diffusivity of 1.814 Carrot Slices. Drying Technology: An International Journal 25(10), 1695-1702 7 Sutar N., Sutar P.P. and G. Singh (2009) Evaluation of Different Soybean Varieties for Manufacture of Soy Ice-1.179 cream. International Journal of Dairy Technology, 63(1),136-142 8 Sutar P.P., S. Prasad and D.K.Gupta (2007) Modeling Fluidized Bed Drying of Osmotically Dehydrated Onion 0.974 Slices and Product Quality Evaluation. Transactions of American Society of Agricultural and Biological Engineers, 51(2), 567-572 9 Sutar P.P. and S. Prasad (2011) Modeling Mass Transfer Kinetics and Mass Diffusivity During Osmotic 0.463 Dehydration of Blanched Carrots. International Journal of Food Engineering, 7(4), Article 21 10 Visavale G.L., P. P. Sutar and B.N. Thorat (2011) Comparative Study on Drying of Selected Marine Products: 0.463 Bombay Duck (Herpodon nehereus) and Prawn (Penaeus indicus). International Journal of Food Engineering, 7(4), Article 20 11 Jadhav D.B., U.S.Annapure, B.N. Thorat, G.L. Visavale and P. P. Sutar (2010) Solar Cabinet Drying of Bitter 0.463 Gourd: Optimization of Pretreatments and Quality Evaluation. International Journal of Food Engineering, 6(4), article 5 12 Giri S. K. Prasad S. Mohapatra, D. and P.P. Sutar. (2005). Radio Frequency Heating Applications in Food Processing and Packaging Industries. Packaging India, 38(2), 39-46 13 Sutar N., Sutar P.P. and D. Mohapatra (2009) New Horizons in Functional Food Sector. Journal of Dairying, Foods and Home Science, 29 (3/4), 166-172 14 Sutar P.P., P.M. Nimkar, S.B. Gawande and R.A. Dhande (2013) Physical properties of delinted cotton seeds, Journal of Food Research and Technology, Vol 1 (1), 29-34 15. Sayyad F.G., Sutar P.P. and N.K. Agarwal (2013) Optimization of Moisture Loss and Fat Uptake of Goat Meat During Frying using Response Surface Methodology. Journal of Meat Science and Technology, 1(2), 56-63 16. Sutar N. and P.P. Sutar (2014) Developments in Osmotic Dehydration of Fruits and vegetable. Trends in Post-Harvest Technology, 1(1), 20-36 17. Dhumal C.V., I.L. Pardeshi, P.P. Sutar and R.V. Jayabhaye (2014) Development of Potato and Barnyard Millet Based Ready to Eat (RTE) Fasting Food. Journal of Ready to Eat Foods, 1(1), 11-17 18. Giri S. K., P.P. Sutar and Suresh Prasad (2014) Effect of Process Variables on Energy Efficiency In Microwave-Vacuum Drying of Button Mushroom. Journal of Food Research and Technology, Vol 2 (1), 31-38 Articles in Conference Proceedings 1. Sutar P.P., G.S.V. Raghavan, Y. Gariepy and S. Prasad (2009) Optimization of Osmotic Dehydration of Potato Cubes Under Pulsed Microwave Vacuum Environment in Ternary Solution. In Proceedings of 6th Asia Pacific Drying Conference (ADC 2009) held at Bangkok, Thailand during October 19-21, pp.165-173. 2.Gaware T., Sutar P.P. and Thorat B.N. (2009) Effect of Pretreatments on Mass Transfer During
- Osmotic Dehydration of Indian Gooseberry (Emblica officinalis). In Proceedings of 6th Asia Pacific Drying Conference - 2009 (ADC 2009) held at Bangkok, Thailand during October 19-21, pp. 397-401. 3.Sutar P.P. and Suresh Prasad (2009). Modeling Moisture Diffusivity during Microwave Vacuum
- Drying of Osmotically Dehydrated Carrots. In Proceedings of Annual International Meeting of American Society of Agricultural and Biological Engineers held at Reno, Nevada, USA during June 21-24, 2009.

- 4.Sutar P.P., S. Prasad, N.Sutar and B.N.Thorat. (2008). Effect of Microwave Power Density and Pressure on Selected Quality Parameters of Dehydrated Carrots. In Proceedings of 16th International Drying Symposium (IDS2008) held at Ramoji Film City, Hyderabad during November 9-12, Volume B, pp. 835-842.
- 5.Sutar P.P. and S. Prasad (2007) Moisture Diffusivity and Product Temperature Analysis of Carrot Slices in Microwave Vacuum Rotary Chamber Dryer. In Proceedings of Annual International Meeting of American Society of Agricultural and Biological Engineers at Minneapolis, Minnesota, USA held during July 17-20, Paper No.076021.
- 6.Giri S.K., Prasad S. and Sutar P.P. (2005) Drying Kinetics of Microwave-Vacuum and Convective Hot-Air Dried Button Mushrooms. In Proceedings of Asia Pacific Drying Conference (ADC 2005) Allied Publishers Pvt. Ltd., Vol. I, pp. 276-288.
- 7.Sutar P. P., Prasad S., Giri S.K. and P. Anand Kumar (2005) Microwave Vacuum Drying of Potato Cubes and Selection of Suitable Drying Model. In Proceedings of Asia Pacific Drying Conference (ADC 2005) Allied Publishers Pvt. Ltd., Vol. I, pp. pp. 373-380.
- 8.Sutar P.P. and S. Prasad (2005) Fluidized Bed Drying of Osmotically Dehydrated Onion Slices and Selection of Suitable Drying Model. In Proceedings of Annual International Meeting of American Society of Agricultural Engineers held at Florida, USA during July, 17-20, Paper No. 056158.
- 9.**Sutar P.P.** and P.M.Nimkar (2004) Thermal Properties of Delinted Cotton Seeds. In Proceedings of International Conference-Emerging Technologies in Agricultural and Food Engineering held at Indian Institute of Technology Kharagpur during December 14-17, pp. 5-8.
- 10.**Sutar P.P.**, S.K.Giri and S. Prasad. (2008). Microwave -Vacuum Drying of Fruits and Vegetables. In Proceedings of Institution of Engineers (India) seminar held in February, 2006 at Kolkata
- 11.Sutar P.P. and Suresh Prasad. (2007). Modeling Mass Transfer Kinetics during Osmotic Dehydration of Carrots. In Proceedings of Indian Convention of Food Scientist and Technologists held at Indian Institute of Technology Kharagpur during December 31, 2007 to January 02, 2008
- 12.Sutar P.P. and Suresh Prasad. (2007). Advances in Microwave Assisted Heating and Drying Technology for Foods. In Proceedings of Indian Convention of Food Scientist and Technologists held at Indian Institute of Technology Kharagpur during December 31, 2007 to January 02, 2008

ponsored Projects Undertaken		
National Agricultural Innovative Program (NAIP), Indian Council of Agricultural Research	2013-14	
Development of E-course on fluid mechanics, AAU, Anand		
Development of E-course on drying and storage engineering, AAU, Anand		
Industrial Consultancy Work		
Twin Engineers, GIDC, Vadodara, Gujarat	2014-	
Microwave Processor Design for rapid thermal processing (Drying and		
sterilization) of agricultural, chemical and biomaterials		
Steelhack Industries, GIDC, VV Nagar, Anand, Gujarat	2008-09	
Design of multipass recirculatory hybrid (Solar+biowaste fired)		
dryer of 300 kg capacity for marine (Fish, prawns), agricultural		
and chemicals materials		
Improvements in air heating solar panels to absorb more radiations		
JayVeer Foods, Patan, Mahesana, Gujarat	2008-1	
Development of processes for drying of fruits, vegetables, spices		
and instant cooked subji (Indian recipes)		
S B Panchal and Company, Dadar, Mumbai	2007-0	
Design of cylindrical microwave vacuum oven cum Dryer for material		
processing		
NRI Dehydrated Foods, Kamrej, Surat	2008-09	
Development of small scale dehydration industry		

Post Graduate Thesis Supervision	2010
Development of fermented cereal - legume based instant food (Dhokla) using microwave radiation	2010
MTech (Food Processing Techhnology)	
Hybrid (Osmotic and Microwave Vacuum) Drying of	2011
Elephant Foot Yam	
MTech (Food Processing Techhnology)	
INVITED SPEAKER	
<ol> <li>Invited speaker in 1<sup>st</sup> workshop on "Dehydration of Food and Agricultural Produ and Prospects" held in March, 2014 at National Institute of Food Technology En Management (NIFTEM) Campus, Kundli (Sonepat).</li> </ol>	
2. Invited speaker in KVK KRISHIKA, Gujarat University, in January 2013	
3. Invited speaker in Drying and Food Processing Technology workshops held at An Anand during 2011, 2012 and 2013	and Agricultural University,
4. Delivered expert lectures in industrial workshop on "Food Preservation and Therr organized in December, 2011 for ITC RTE Foods Division in Bangalore Total number of industry personnel trained : 30	nal Processing Techniques,"
5.Delivered expert lectures in industrial workshops on "Thermal Sterilization Technorganized in December, 2010 in Chennai and Mumbai Total number of industry personnel trained: 28	nologies for Foods,"
Participants' Companies: ITC Foods Ltd. Bangalore, Mother dairy, Mahananda	dairy, Hamdard Laboratory,
Kraft foods and many other Canning and Dehydration industries.	
6.Delivered expert lectures in industrial workshop on "Advanced Dehydration Tech organized in December, 2010 in Twin Engineers, Vadodara.	nologies for Foods,"
Total number of industry personnel trained: 10	
<ol> <li>Delivered a lecture on "Value Addition to Fisheries" in eAqua Extention worksho Technology Bombay in July, 2008</li> </ol>	p neid at indian institute of
<ol> <li>Belivered lectures on "Value Addition to Agricultural Produce through Drying an Mahosav, held during May-June 2010,11,12,13,14 to farmers of different 50+ v</li> </ol>	
LANGUAGES	
English	
Hindi	

Marathi

## MEMBERSHIPS

Life Member, Indian Society of Agricultural Engineers

Other Academic Activities

Member, Research Council, Anand Agricultural University

2010-11

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